CCR Nurses:

Collaborative, Committed, and Caring Amidst Complexity

A welcoming presence at the door and a familiar face going forward—in addition to the best chances for treatment, this is also what cancer patients seek when they enroll in one of CCR's many clinical trials. As consistent points of contact during treatment, CCR nurses Mary Ann Yancey, Megan Mackey, Melissa Walker, and Marcia Mulquin meet that obligation, even as they tend to the administrative details of managing research. As caregivers, CCR nurses provide a reassuring presence for patients. And as liaisons among patients, physicians, and pharmaceutical companies, they manage the critically important flow of clinical information from the bedside to the research database.

As in other medical settings, cancer treatment at CCR is a collaborative effort directed by a team of doctors and nurses who oversee a patient's daily care—but working in a research environment adds even more responsibility: to aid in the development of safe, potentially better cancer therapies. As highly trained professionals in oncology, CCR nurses aim to make a patient's cancer journey as successful as possible. During

cancer treatment, patients experience side effects and anxiety, which contribute to a reduced quality of life. CCR nurses work tirelessly to address these complicating factors using the most advanced techniques available.

The Nurse Practitioners

Some nurses have "hands-on" jobs that tend to the clinical aspects of patient care, while others have administrative responsibilities ensuring that the

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many clinical trial protocols are carried out seamlessly. Mary Ann Yancey's job is among the former. A former Peace Corps volunteer, Yancey came to CCR's Medical Oncology Branch Multiple Myeloma Section, headed by Ola Landgren, M.D., Ph.D., in 2007 after finishing her master's degree in oncology nursing at George Mason University. She compares the workings of various research teams at CCR to the parts of a bicycle. "The principle investigators are like the bike frame," she said. "They bring us the science, the hypotheses, and the protocols. The research nurses are the hub of the bicycle wheels. They connect the needs of the protocol with the rest of CCR to make sure the protocol is followed as written and keep the whole thing running." Her greatest pleasure is seeing how new treatments developed through CCR's clinical trial programs can really help patients,



Mary Ann Yancey, R.N., C. Ola Landgren, M.D., Ph.D., and Marcia Mulguin, R.N.

not just physically, but also by giving them hope. She recalls one patient, a 26-year-old woman with cutaneous T cell lymphoma, a type of non-Hodgkin's lymphoma that manifests in the skin. Nothing had worked until the patient was enrolled in a Phase 1 clinical trial with intravenous fenretinide, a drug related to vitamin A. "That was four years ago, and as of today she continues to be free of disease and able to care for her two children," Yancey said. "This type of experience makes my job very rewarding."

Yancey said that most CCR patients arrive fearful and confused. and what she has learned over time is how listening to what patients say often helps to calm their fears. "I try to be as communicative as possible; I try my best to listen to their concerns and answer their questions as quickly and as best as I can. When I don't have the answer, I will look to other sources to help them better understand their disease as well as

what we are trying to accomplish here," she said. The entire research collaboration is focused on the patient, Yancey added. "Everyone at CCR tries their best to make this as easy an experience as possible for the patient. Without the patient and their time and commitment, there would be no research." she said.

As a research nurse, Yancey also participates in administrative duties: she schedules labs and clinical procedures, and helps to guide patients in their journey through the clinical trial protocol. Yancey acknowledges the hardships that come with her job. One patient—a 56-year-old male truck driver who was treated six vears earlier for breast cancer—arrived in the clinic with his family and with a new diagnosis of pancreatic cancer. "He enrolled in a Phase 1 trial of gemcitabine, cisplatin, and an experimental drug and responded well initially. It was very gratifying to see the treatment work, at least for a

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while," Yancey said. "But sadly, after six months, his disease progressed. Talking about this with him and his family was extremely difficult."

Mackey, Megan nurse practitioner in CCR's Neuro-Oncology Branch, headed by Howard Fine, M.D., also describes her work as highly rewarding because it occurs in an environment where new treatments are constantly evolving. Mackey came to the NIH in 1999 for an internship after graduating from nursing school at the University of Rochester and

decided to stay on full-time—working first in a stem cell transplant unit, and then in the Oncology Day Hospital. After earning a Master's Degree in Nursing (MSN) in 2006 from the University of Maryland, she was offered the position she holds today, tending to patients with primary brain tumors and tumors of the spinal cord. "These are such terrible illnesses with such a great need for new therapies," she said. "And that makes it a great field for research and a huge part of why I enjoy being part of that process."

The Branch team—five nurse practitioners, two patient care coordinators, three clinical fellows, three research nurses, and four attending physicians including Finehave seen, or consulted on, thousands of patients. Some of them are newly diagnosed, others are waiting for diagnosis, and others are in the midst of treatment. "We work together with our patients in every way that we can, from diagnosis until they leave the program," she said. "The patients we see here are really looking to us for guidance and are very appreciative of the wealth of knowledge that our Branch can offer."



Megan J. Mackey, C.R.N.P., working in the clinic.

Most of the patients undergoing treatment in the Branch participate in drug trials, and for them, Mackey takes medical histories, performs physical exams, orders tests and medications. confirms that patients enroll in the right studies, reviews imaging scans and laboratory results, and monitors side effects. "Doctors make most of the major decisions when it comes to imaging, patient stability, and treatment," she explained, "but we do the exams, report back findings, and help to decide what's needed next." The Neuro-Oncology Branch also works with hundreds of enrollees in a

separate, natural history protocol. In this group, Mackey and her colleagues work with local doctors throughout the country to guide patient treatment. "Primary brain tumors are relatively rare and that's our main focus," Mackey said. "Word of mouth travels quickly among those faced with this disease, and many of our referrals are actually from current patients."

The Research Coordinators

As a research nurse in CCR's Surgery Branch, Melissa Walker's job is less clinical, yet equally important in ensuring every possible success for patients who come to the Surgery Branch. Walker first came to the NIH in 2001 after graduating from nursing school at Florida State University, and has been working in the Surgery Branch since 2007. She now works with Itzhak Avital, M.D., who heads the Surgery Branch's Gastrointestinal and Hepatobiliary Malignancies Section,

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and whose research focus is on solid organ cancer stem cells.

While nurse practitioners take on clinical responsibilities, research nurses focus on clinical study protocols. Patients typically interact more with research nurses than with others at CCR, and Walker said these routine contacts are what motivates her in her job. "Working with another research nurse and a clinical coordinator, together we see patients from their initial call until they complete therapy or leave the study," she said. "Interacting with patients for that length of time really allows us to establish close relationships with them."

Like Walker, Marcia Mulquin, a research nurse with the Medical Oncology Branch's Multiple Myeloma Section, headed by Ola Landgren, M.D., Ph.D., coordinates patient care and research participation for the duration of treatment. Mulquin came to the NIH in 1983, after receiving

her nursing degree from East Carolina University. She specialized in oncology but also worked in other areas, including intensive care, infectious disease, immunology, and behavioral health, where she treated patients with depression, substance abuse problems, and other issues. She said she enjoys being part of a research team, describing it as unique to the NIH work environment. "It's the best of both worlds," she said. "One day you're working closely with other nurses in the clinic, and the next day you might be amending trial protocols with a sponsoring drug company." Mulquin also emphasizes her role as an educator. Patients tend to be savvy about their illness, she said, but not about the drugs. "You have to get them up to speed fast," she explained. "Patients are often fearful, and our job is to bring them hope and keep them safe. For example, certain drugs can lower white cell

counts, so patients need to be aware of what that means, and to be on the lookout for low-grade temperatures or any signs of infection."

Mulquin emphasizes the collaborative nature of her work, both in terms of treatment and research. She said she collaborates closely with clinic nurses and other team members who routinely update one another on each patient's status. On the research side, Mulguin and her team work hard to ensure that databases remain error-free, and she describes toxicity monitoring as a "huge" part of the job, with a responsibility to determine if adverse events could be related to the experimental treatment, and if so, how that might influence dosing. "I've been here 28 years, and I love the research side of it," she said. "As a nurse, it's extremely rewarding to see new therapies advance in a research setting, and we often see patients who've had complete remissions. By the time they get here, patients may feel like they don't have many options left—so to be even a small part of a potential solution, to provide a better quality of life, those are the goals. We all do everything we can to make that happen."



Melissa Walker, R.N., with patient Norman Holmes

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